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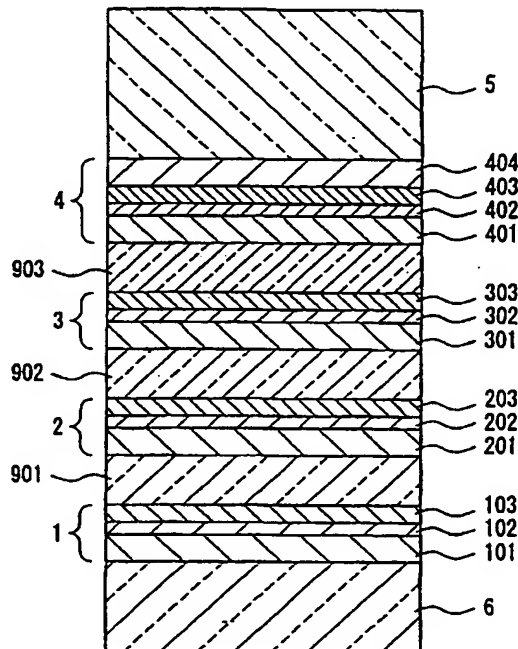
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- (81) 指定国 (国内): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS,

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(54) Title: OPTICAL INFORMATION RECORDING MEDIUM AND PRODUCTION METHOD THEREFOR

(54) 発明の名称: 光学情報記録媒体とその製造方法



A...LASER BEAM

(57) Abstract: An optical information recording medium including at least m information layers (m ; an integer of at least 2), each information layer including a recording layer that irreversibly changes between an A state and a B state optically different from each other. When m information layers are counted as 1st to m -th information layers with one closest to a laser beam incident side first, a recording layer contained in a j -th information layer (j ; an integer satisfying $1 \leq j \leq m-1$) is a j -th recording layer; and when the transmittance of the j -th information layer when in an A state is TA_j (%) and the transmittance of the j -th information layer when in a B state is TB_j (%), the j -th information layer satisfies the relation, $0 \leq |TA_j - TB_j| / (TA_j, TB_j)_{\max} \leq 0.10$ (where $(TA_j, TB_j)_{\max}$ is a value given by whichever is larger, TA_j or TB_j). In addition, at least one recording layer out of 1st to $(m-1)$ -th recording layers is formed of a material different in complex refractive index ($n - ik$, where n is refractive index and k extinction factor) from that of an m -th recording layer.

(57) 要約: 本発明の光学情報記録媒体は、少なくとも m 層 (m は、2 以上の整数である。) の情報層を含み、各情報層は、光学的に互いに異なる状態 A と状態 B との間を非可逆的に変化する記録層を含む。 m 層の情報層をレーザー光入射側から第 1 ~ 第 m の情報層とした場合、第 j の情報層 (j は、 $1 \leq j \leq m-1$ を満たす整数である。) に含まれる記録層を第 j の記録層、第 j の記録層が状態 A であるときの第 j の情報層の透過率を TA_j (%)、第 j の記録層が状態 B であるときの第 j の情報層の透過率を TB_j (%) とすると、第 j の情報層は $0 \leq |TA_j - TB_j| / (TA_j, TB_j)_{\max} \leq 0.10$ (但し、 $(TA_j, TB_j)_{\max}$ とは、 TA_j と TB_j のうち大きい方の値のことである。) の関係を満たす。さらに、第 1 ~ 第 $m-1$ の記録層のうち少なくとも 1 つの記録層が、第 m の記録層と複素屈折率 (屈折率を n 、消衰係数を k としたときの $n - ik$) の異なる材料にて形成されている。



LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG,
SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
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OAPI 特許 (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
ML, MR, NE, SN, TD, TG).

添付公開書類:

— 国際調査報告書

2 文字コード及び他の略語については、定期発行される
各 PCT ガゼットの巻頭に掲載されている「コードと略語
のガイダンスノート」を参照。

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP03/11809

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl⁷ G11B7/24, 7/26

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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Kokai Jitsuyo Shinan Koho	1971-2003	Jitsuyo Shinan Toroku Koho	1996-2003

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 2002-133712 A (Matsushita Electric Industrial Co., Ltd.), 10 May, 2002 (10.05.02), Full text; all drawings & EP 1180767 A2	1-17
A	JP 2002-251778 A (Matsushita Electric Industrial Co., Ltd.), 06 September, 2002 (06.09.02), Full text; all drawings & EP 1215669 A2	1-17
A	JP 2002-230828 A (Pioneer Electronic Corp.), 16 August, 2002 (16.08.02), Full text; all drawings & EP 1229528 A2	1-17

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

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Telephone No.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP03/11809

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 2000-235733 A (Sony Corp.), 29 August, 2000 (29.08.00), Full text; all drawings (Family: none)	1-17